In the claims:

1. (original) In a signaling network in which signaling messages are communicated between signaling points of the signaling network, an improvement of apparatus for selectably encoding at least portions of a signaling message communicated by way of a first selected signal point to at least a second selected signal point, said apparatus comprising:

an encryption selector operable responsive to delivery of the signaling message at the first selected signal point, said encryption selector for selecting which, if any, portion of the signaling message to encrypt; ~~and~~

an encryptor adapted to receive indications of the signaling message and to receive indications of selection made by said encryption selector, said encryptor selectably for encrypting the portion of the signaling message selected by said encryption selector to be encrypted, the signaling message thereafter to be forwarded on to the second selected signaling point; and

an encryption selection database accessible by said encryption selector, said encryption selection database maintaining an index that comprises indicia associated with an originating node that originates the signaling message, and with an identifier that identifies the second selected signal point to which the signaling message is to be forwarded, wherein at least one of the originating node and the identifier are indexed together with values representative of which, if any, portion of the signaling message is to be encrypted;

wherein the signaling message comprises a payload part that said encryptor selectably encrypts, said payload comprises at least a selected one of an MTP3 part and an AP part, and wherein said encryption selector selects, if any, at least one of the MTP3 part and the AP part.

2. (original) The apparatus of claim 1 wherein the signaling network comprises an SS7 signaling network, wherein the first selected signal point comprises a first signaling transfer

point and wherein said encryption selector and said encryptor are embodied at the first signaling transfer point.

3. (currently amended) The apparatus of claim 1 wherein ~~further comprising an encryption selection database accessible by said encryption selector,~~ said encryption selection database maintains[[ing]] an index of which portion, if any, of the signaling message is to be encrypted, and wherein said encryption selector accesses the index maintained at said encryption selection database pursuant to the selection of which, if any, portion of the signaling message to encrypt.

4. (canceled)

5. (canceled)

6. (currently amended) The apparatus of claim 1 wherein the signaling message comprises a header part and [[a]] said payload part and wherein the portion, if any, of the signaling message selected by said encryption selector to be encrypted comprises a selected portion of the payload part.

7. (original) The apparatus of claim 6 wherein the signaling network comprises an SS7 signaling network, wherein the signaling message comprises a message signaling unit, and the payload part of the signaling message comprises a portion of the message signaling unit.

8. (canceled)

9. (original) The apparatus of claim 1 wherein said encryptor encrypts the portion of the signaling message pursuant to a public-key encryption scheme.

10. (previously presented) The apparatus of claim 9 wherein the second selected signal point to which the signaling message is to be forwarded is identified by an identifier and wherein the public-key encryption scheme used by said encryptor encrypts the portion, if any, of the signaling message using a public encryption key associated with the identifier that identifies the second selected signal point.

11. (original) The apparatus of claim 10 wherein said apparatus further comprises an encryption key database accessible by said encryptor, said encryption key database maintaining an index that indexes together the public encryption key and the identifier associated therewith.

12. (original) The apparatus of claim 11 wherein said encryptor accesses said encryption key database pursuant to encryption of the portion of the signaling message selected by said encryption selector to access the encryption key associated with the second selected signal point.

13. (original) In the signaling network of claim 1 further including apparatus for selectably decoding the signaling message, said apparatus comprising:

a detector adapted to receive indications of the signaling message, said detector for detecting which, if any, part of the signaling message is encrypted; and

a de-encryptor adapted to receive indications of detections made by said detector and to receive indications of the signaling message sent to the second selected signal point, said de-encryptor selectably for de-encrypting the encrypted portion, if any, of the signaling message.

14. (original) The apparatus of claim 13 wherein the signaling message is delivered to said detector and to said de-encryptor by way of an untrusted communication path.

15. (original) The apparatus of claim 13 wherein de-encryption performed by said de-encryptor utilizes an encryption key to de-encrypt the encrypted portion, if any, of the signaling message.

16. (currently amended) In a method of communicating in a signaling network in which signaling messages are communicated between signaling points of the signal network, an improvement of a method for selectably encoding at least portions of a signaling message communicated by way of a first selected signal point to at least a second selected signal point, said method for selectably encoding comprising:

selecting, responsive to delivery of the signaling message at the first selected signal point, which portion, if any, of the signaling message to encrypt; [[and]]

selectably encrypting, responsive to selection made during said operation of selecting, the portion, if any, of the signaling message; and

maintaining an index that comprises indicia associated with an originating node that originates the signaling message, and with an identifier that identifies the second selected signal point to which the signaling message is to be forwarded, wherein at least one of the originating node and the identifier are indexed together with values representative of which, if any, portion of the signaling message is to be encrypted; and thereafter

forwarding on the signaling message to the second signal point.

17. (original) The method of claim 16 wherein the signaling network comprises an SS7 signaling network, wherein the first selected signal point comprises a first signaling transfer point, and wherein said operations of selecting and selectably encrypting are performed at the first signal transfer point.

18. (original) The method of claim 16 further comprising the operations of delivering the signaling message to the second signal point, determining whether any portion of the signaling message is encrypted, and decrypting the portion of the signaling message that is determined during said operation of determining to be encrypted.

19. (original) The method of claim 18 wherein said operation of forwarding is performed by way of a communication path of an untrusted level of security.

20. (original) The method of claim 18 wherein said operations of encrypting and decrypting are performed pursuant to a public-private key encryption and decryption scheme.